

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/668,196	RUSSELL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Zachariah Lucas	1648	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the After-Final Amendment of May 5, 2006, and the interview of July 6, 2006.
2. ☒ The allowed claim(s) is/are 1-7,9,11-22,24,26 and 28-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>5-5-06</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date <u>7-6-06</u>.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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## **DETAILED ACTION**

### ***Status of the Claims***

1. Claims 1-7, 9, 11-22, 24, 26, and 28-30 are pending and under consideration in the present action.
2. In the prior action, the Final action mailed on February 7, 2006, claims 1-7, 9, 11-22, 24, 26, 28-30, and 33 were pending and rejected.

In the After-Final Response submitted on May 5, 2006, claim 22 was amended, and claim 33 was cancelled.

In view of the arguments presented in the After-Final Response, and the amendment to claim 1 below, the rejections of record are withdrawn, and claims 1-7, 9, 11-22, 24, 26, and 28-30 are allowed.

## **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Patrick Finn on July 6, 2006.

The application has been amended as follows:

Claim 1 is amended to read as follows:

- - 1. A method for reducing the number of viable cancer cells in a mammal having viable cancer cells therein, comprising administering attenuated measles virus to said mammal under conditions wherein the number of viable cancer cells in said mammal is reduced. - -

The amendments were made to clarify that the method involves the administration of the attenuated viruses to a mammal having cancer. The amendment is not intended to change the scope of the claims.

***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on May 5, 2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

***Claim Rejections - 35 USC § 112***

5. **(Prior Rejection- Withdrawn)** Claims 1-7, 9, 11-22, 24, 26, 28, 29, and 33 were rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the claimed methods for reducing the number of viable cancer cells in a mammal comprising the administration of Edmonston Measles Virus strains identified in the present application, does not reasonably provide enablement for methods of reducing cancer cells using any attenuated Measles Virus. The Applicant's arguments are found persuasive. The rejection is therefore withdrawn.

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6. **(Prior Rejection- Withdrawn)** Claims 1-7, 9, 11-22, 24, 26, 28, 29, and 33 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Applicant's arguments are found persuasive. The rejection is therefore withdrawn.

***Claim Rejections - 35 USC § 103***

7. **(Prior Rejections- Withdrawn)** Claims 1-7, 9, 11-17, 20-22, 24, 26, and 28-30, and 33 were rejected in the prior action under 35 U.S.C. 103(a) as obvious over the teachings of Bateman et al. in view of Usonis et al. (Ped Inf Dis J 18:42-48), and further in light of the teachings of Linardakis, the Bateman abstract, Taqi, Bluming, and Johnston. Claims 16 and 17 were rejected in the prior action under 35 U.S.C. 103(a) as obvious over the teachings of Bateman et al. in view of Usonis in view of either Asada (Cancer 34: 1907-28, of record in the IDS filed on Jan 5, 2001) or Sato et al (Int J Oral Surg 8:205-11, of record in the IDS filed on July 12, 2002) and further in view of the teachings and suggestions of Linardakis, the Bateman abstract, Taqi, Bluming, and Johnston. Claims 18 and 19 were rejected in the prior action under 35 U.S.C. 103(a) as obvious over the teachings of Bateman et al., in view of Usonis, further in view of Duprex (J Virol 73: 9568-75), and in light of the teachings of Linardakis, the Bateman abstract, Taqi, Bluming, and Johnston. Claim 20 was rejected in the prior action under 35 U.S.C. 103(a) as obvious over the teachings of either Galanis et al. (Gene Therapy 6 (Supp 1): S7, abstract 28) or Russell et al. (Proc. Am Assoc Cancer Res 41: 259, abstract 1648) in view of Usonis, and further in light of the teachings of Linardakis, the Bateman abstract, Taqi, Bluming, and Johnston.


The Applicant's arguments regarding the unexpected ability of the attenuated viruses to preferentially target cancer cells are found persuasive. The rejection is therefore withdrawn.

*Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachariah Lucas whose telephone number is 571-272-0905. The examiner can normally be reached on Monday-Friday, 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Z. Lucas 7/6/06  
Patent Examiner



BRUCE R. CAMPPELL, PH.D  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600